REMARKS

Claims 1-26 are pending in the application.

Claim Rejection 35 U.S.C. § 102

35 U.S.C. § 102(e)

Claims 1-26 stand rejected under 35 U.S.C. §102(e) as anticipated by Westby, J. United States Patent Number 6,502,189 (hereinafter Westby). Applicants respectfully traverse. The present invention generally is directed to an apparatus for dual porting a serial disk drive for improved suitability in fault tolerant communication systems such as fibre channel or the like.

Claim 1, but as generally applicable to the other independent claims, recites an apparatus having a first idle regenerator being capable of transmitting signals including an idle character stream, a second idle regenerator being capable of transmitting signals including an idle character stream is additionally included, and a third idle regenerator connected to the first and second idle regenerators and the serial disk drive. The Westby reference fails to teach the present invention. Rather, Westby discloses a system implementing a dedicated transmit-frame buffer for porting. Westby, Abstract. Westby fails to disclose or suggest the use of idle regenerators for utilization in dual porting serial disk drive, therefore Westby fails to anticipate Claim 1. Anticipation requires the disclosure in a single prior art reference of each element of the claim under consideration. *W.L. Gore & Assocs. v. Garlock*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), *cert. denied*, 469 U.S. 851 (1984). Further, "anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claim." *Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co.*, 730 F.2d 1452, 221 USPQ 481, 485 (Fed. Cir. 1984) (citing *Connell v. Sears, Roebuck & Co.*, 722 F.2d 1542, 220 USPQ 193 (Fed. Cir. 1983). Emphasis added. Additionally, the Westby reference fails to teach how asserted idle regenerator "fig. 3 Port A 20 wherein the Port A includes A_IN 3021 and A_OUT 3023" (cited in the Instant Action, item 3 page 2) operates as an idle regenerator. Instead, the referenced portion of Westby merely indicates the transfer of

a ten-bit parallel data communicated from the transceiver 115, upon conversion from serial protocol. Westby, Col. 12, lines 64-67. Nowhere does Westby teach or suggest an apparatus utilizing a first, a second, and a third idle regenerator as recited in the claims. Westby teaches a system utilizing a dedicated frame buffer to permit transmitting initialization or response frames while another port is transmitting data frames. Westby, Abstract.

Furthermore, Westby fails to disclose the use of an idle regenerator capable of transmitting signals including an idle character stream as recited in the claims. Nowhere does the Westby reference teach or disclose a first idle regenerator capable of transmitting an idle character stream. In the outstanding action, Westby, Col. 12, lines 43-49 is incorrectly asserted as disclosing this ability. Westby, Col. 12, lines 43-49 are reproduced below for the Office's convenience.

> In other embodiments, these transceivers **115** are integrated into chip **110**. The parallel data (input from the fibre channel) are captured using receive clocks from the receiver portion of each transceiver **115**, and are converted to a twenty-bit-wide format before decoding using a parallel 8B/10B decoder. The sixteen-bit data plus two k-characters (used to denote special ordered sets) are then checked for word validity before being placed in the arbitrated-loop logic **26**. The output of the arbitrated-loop logic **26** is re-synchronized,

Westby, Col. 12, lines 43-49.

The cited portion of Westby discloses serialization/deserialization of data between a parallel/serial communication environments. Westby fails to teach an idle regenerator capable of transmitting signals including an idle character stream and thus, does not anticipate the present invention.

Moreover, the asserted "third idle regenerator", i.e., the ON-CHIP BUFFER 119 (FIG. 3) is not connected to the serial disk drive and the first and second idle regenerators for being capable of communicating with the serial disk drive and the first and second idle regenerators. Rather the On-Chip Buffer includes a transmit-frame buffer which includes reserved portions for Ports A and B such that an alternate port transmit/receive frames is possible when transferring data for the primary port. Westby Col. 8, lines 10-26 and Col.

10, lines 52-56. The Westby reference fails to teach or suggest a third idle regenerator connected to the serial disk drive and the first and second idle regenerators for being capable of communicating with the serial disk drive and the first and second idle regenerators. Anticipation cannot be established when "the prior art is lacking or missing a specific feature or the structure of the claimed invention." *Lindermann Maschinenfabrik GmbH v. American Hoist & Derrick Co.*, 730 F.2d 1452, 221 USPQ 481, 485 (Fed. Cir. 1984) (citing *Connell v Sears, Roebuck & Co.*, 722 F.2d 1542, 220 USPQ 193 (Fed. Cir. 1983)). In order for a reference to anticipate, "[a]n anticipating reference must describe the patented subject matter with sufficient clarity and detail to establish that the subject matter existed and that its existence was recognized by persons of ordinary skill in the field of invention." *ATD Corp.v. Lydall, Inc.*, 48 USPQ.2d 1321, 1328 (Fed. Cir. 1998) citing *In re Spada*, 15 USPQ.2d 1655, 1657 (Fed. Cir. 1990). Emphasis added. As a *prima facie* case of anticipation is not met, removal of the pending rejection under 35 U.S.C. §102(e) is requested and allowance is earnestly solicited.

Claims 2 and 18 further recite an auto detector capable of controlling data transfers to the first and the second idle regenerators base on the presence of idle characters from the first and the second serial master devices. The cited portion of Westby in the outstanding Action, as well as, the entire Westby reference fails to teach an auto detector as recited in the claims rather the structure is a "loss-of-receive-clock detector 24". Westby, Col. 12, lines 34-35. The loss-of-receive-clock detector 24 operates to detect when the receive clocks from the transceiver 115 have stopped such that the word-sync state machine maybe reset. Westby Col. 13, 20-25. The loss-of-receive-clock detector fails to be capable of controlling data transfers to the first and the second idle generators based on the presence of idle characters and therefore fails to anticipate the recited invention. Removal of the pending rejection is respectfully requested.

With respect to Claim 3, which depends from Claim 2, Westby fails to anticipate the apparatus recited in Claim 3 as the loss-of-receive-clock detector 24 is not capable of

switching between the first and the second serial masters as recited in Claim 3. Instead Westby discloses that the loss-of-receive-clock detector 24 is utilized to reset the word-sync machine to prevent data from going into the FIFO in arbitrated loop logic 26. Westby Col. 13, lines 20-28. Removal of the pending rejection is respectfully requested and allowance is earnestly solicited.

Regarding Claims 4, 12, 19, and 24, Westby, Col. 16, lines 47-56 discloses that the data-frame buffer or one of the receive-frame buffers may be selected to utilize the receive-frame logic. Neither the cited portion of Westby, nor anywhere in the Westby reference is an auto detector enabling communication with a single serial master at a time disclosed. Rather, Westby Col. 16, lines 48-52 discloses that a single-frame buffer can only be used for one port at any one time. Removal of the pending rejection is respectfully requested and allowance is earnestly solicited.

Claims 5, 6, 11, 13, 20, and 21 are believed to be allowable based on their dependence from Claims 1, 10, and 17. Applicants will not burden the record further. Removal of the pending rejection is respectfully requested and allowance is earnestly solicited.

Regarding the pending rejection under 35 U.S.C. §102(e) to Claims 7 and 14, Applicants traverse. Applicants respectfully request the Office clarify the pending rejection as the Office is now apparently asserting that the arbitrated loop logic 26 (FIG. 4) is the synchronization logic (as recited in the claims). In the pending rejection to Claim 1, the Office previously asserted that the word-sync state machine 23 (FIG. 4) is the synchronization logic. Applicants respectfully reassert their arguments to Claims 1 and 10 from which Claims 7 and 14 depend. Removal of the pending rejection is respectfully requested and allowance is earnestly solicited.

Claims 8, 15, 22, and 25 are believed to be allowable based on their dependence from Claims 1, 10, 17, and 23 (discussed below) which are believed to be in a condition for

allowance. Applicants will not burden the record further. Removal of the pending rejection is respectfully requested and allowance is earnestly solicited.

Regarding Claims 9, 16, and 26, Applicants respectfully traverse the pending rejection. The recited portion of Westby (Col.8, lines 7-10), does not teach or suggest a dual porting apparatus including a first idle regenerator, a second idle regenerator, a third idle regenerator wherein the dual porting apparatus is integrated with a serial disk drive. Instead the cited portion merely teaches a parallel SCSI connection. As noted previously, "[a]n anticipating reference must describe the patented subject matter *with sufficient clarity and detail* to establish that the subject matter existed and that its existence *was recognized by persons of ordinary skill in the field of invention.*" *ATD Corp.v. Lydall, Inc.,* 48 USPQ.2d 1321,1328 (Fed. Cir. 1998) citing *In re Spada*, 15 USPQ.2d 1655, 1657 (Fed. Cir. 1990). Emphasis added. Removal of the pending rejection is respectfully requested and allowance is earnestly solicited.

Regarding the pending rejection under 35 U.S.C. §102(e) to Claims 10, 17, and 23 Applicants respectfully resubmit their arguments with respect to Claim 1. Applicants will not burden the record further as the pending rejections to the claims at issue substantially reiterates the Office's position with respect to Claim 1. As a *prima facie* case of anticipation is not met, removal of the pending rejection under 35 U.S.C. §102(e) is requested and allowance is earnestly solicited.

CONCLUSION

In light of the forgoing, reconsideration and allowance of the claims is earnestly solicited.

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